

REMARKS

Upon entry of the above amendments, claims 70 and 72-121 will remain pending. Reconsideration and allowance of the present application are respectfully requested.

In the outstanding Office Action, claims 72-78 have been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claims 70, 72, 84-86, 90-91, and 98-104 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Silver et al. (U.S. Patent No. 5,481,712) in view of Comanicu et al. (Article entitled "Image-Guided Decisions Support System for Pathology"). Claims 73-76 and 92-95 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Silver et al. in view of Comanicu et al. and further in view of Geodeon et al. (Article entitled "Applying Machine Vision and Electrical Component Manufacturing"). Claims 77, 78, 96, and 97 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Silver et al. in view of Comanicu et al. and further in view of Edwards et al. (Article entitled "Machine Vision and its Integration with CIM Systems in the Electronics Manufacturing Industry"). Claims 79-83 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Silver et al., Comanicu et al., and in view of Freifeld (U.S. Published Patent Application 2002/0191836) and further in view of McCall et al. (U.S. Published Patent Application 2004/0005396). Claims 87-89 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Silver et al., Comanicu et al., Freifeld, and further in view of Taylor III et al. (U.S. Patent No. 6, 813,612). Claims 105 and 118-121 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Comanicu et al. and further in view of Freifeld. Claims 106-109 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Comanicu et al., Freifeld, and further in view of Geodeon et al. Claims 110-117 have been rejected under 35

U.S.C. § 103(a) as being unpatentable over Comanicu et al., Freifeld, Geodeon et al., and further in view of Edwards.

Applicant filed a Response on March 15, 2010, in which Applicant referred to a telephone interview with the Examiner on March 10, 2010. Applicant pointed out in the Response filed March 15, 2010 that the present application has gone through a number of different Office Actions and Responses, including different rejections based upon different references, and explained that each of independent claims 70, 105, 118, 119 and 120 recites a number of limitations that Applicant believes distinguish the claimed invention from the references applied in the previous Office Action which applied many of the same references as in the current Office Action. Applicant pointed out a number of reasons why Applicant believes that the claims are not obvious in view of the references. Silver et al. is added to reject independent claim 70, but not to reject independent claims 105, 118, 119, and 120.

In response to the arguments submitted by Applicants, in the present Office Action, the Examiner states the following:

“1) Applicant argues –

Comanicu is not a machine vision system.

1) Examiner’s response –

To the best of the examiner’s understanding, a machine vision system performs the function of capturing image and processing the captured image for certain purposes.

The Comanicu discloses such system as explained in the rejection of claim 70.

Further, page 1 of Comanicu, heading, clearly shows ‘Machine Vision and Application’. For reason stated above, the Examiner considers Comanicu discloses a system in the field of Machine Vision System.

2) Applicant argues –

There is lack of motivation for combining Comaniciu and Frefeld.

2) Examiner's response –

Please refer to the rejection where motivation of combining Comaniciu and Freifeld is provided.”

Applicant notes that some of the limitations recited in each of independent claims 70, 105, 118, 119, and 120 **not disclosed** by Comaniciu et al., Silver et al., or Freifeld (the only references applied to reject independent claims) include a computer from which image data and corresponding vision tool parameters are sent to a remote machine (e.g., claims 70, 118, 119, and 120); and a computer that receives both image data and corresponding vision tool parameters from a remote source (claim 105).

Silver et al. fail to teach sending an image with vision tool parameters for remote processing; Comaniciu et al. and Freifeld also fail to teach this limitation.

Comaniciu et al.

Comaniciu et al. fail to teach sending an image with vision tool parameters for remote processing.

Freifeld

The previous Office Action had asserted that Freifeld had taught including selectable vision tools, and the current Office Action continues this assertion. Applicants' claims recite more than the inclusion of selectable vision tools. This is explained, e.g., at page 15 of Applicants' Response filed March 15, 2010.

The Office Action asserted that it would have been obvious to modify the Comaniciu et al. system to include selectable vision tools in view of Freifeld. The only motivation for reciting

this modification was so that the resulting system would “be able to perform multiple vision operations via multiple selectable vision tools”. Applicant had addressed why this motivation was insufficient, and the Examiner now provides no specific response to that argument. Rather, the Examiner provides a new rejection whereby the Examiner asserts that it would have been obvious to modify the Silver et al. patent to include certain limitations of the Comaniciu et al. reference, and later adds Freifeld to reject certain claims (e.g., claims 79-83 and 87-89) without sufficient explanation.

In rejecting claims 105 and 118-121 with the combination of Comaniciu et al. and Freifeld, the Examiner continues to assert it would have been obvious to provide multiple selectable vision tools in Comaniciu et al., so that Comaniciu et al. could “perform multiple vision operations via multiple selectable vision tools”.

Silver et al.

The Examiner acknowledges at the bottom of page 3 and the top of page 4 of the Office Action that Silver et al. fail to disclose certain recited limitations including (using the Examiner’s wording) “a transmitter configured to send, from the collector computer to a machine vision engine located remotely from the collector computer and via a communications network, (i) the image data and (ii) the corresponding vision tool parameters; and wherein the machine vision engine is remote from the computer ...”.

In this regard, the Examiner asserts that Comaniciu et al. disclose a transmitter configured to send, from a collector computer to a computer remote from the collector computer via a communications network. Comaniciu does not have the sort of vision tools of concern to Silver et al., and is directed to a medical application. No reasoning is provided as to why one would

modify the Silver et al. to include specific limitation taught by Comaniciu et al. The only reason mentioned is that one of ordinary skill in the art might want to employ client-server architecture.

It is apparent that Comaniciu et al. teach no more than the idea of using client-server architecture in general. Assuming arguing that Comaniciu et al. teach using such architecture in a machine vision system such as that disclosed by Silver et al., there still remains the problem that there is no evidence in either Silver et al., Comaniciu et al. and other references of record that would suggest the specific distributed computing architecture limitations recited, namely, “a transmitter configured to send, from the collector computer to a machine vision engine located remotely from the collector computer and via a communications network, (i) the image data and (ii) the corresponding vision tool parameters; and wherein the machine vision engine is remote from the computer ...”.

Applicant again points out that Applicant claims a unique allocation of machine vision elements among separate and remote computers, and the existence of machine vision functions in a system such as that taught by Freifeld does not amount to a suggestion to what Applicant has claimed. In fact, even if one were to combine the references, the resulting system would include no more than a system that remotely performs feature matching. Absence the use of Applicant's own disclosure in hindsight, there is no basis in evidence, for example, any basis by deduction or by any inferred or direct disclosure in a reference, to suggest modifying the Silver et al. or Comaniciu et al. systems to include the specific recited limitations, including sending a chosen vision tool and vision tool parameters.

In Comaniciu et al., even if modified as a certain previous Office Action or used to modify the Silver et al. patented system, extracted feature data (not vision tool choice and parameter data) are sent. See Comaniciu et al., Fig. 1.

As can be seen viewing Comaniciu et al., the distribution of image processing functions among different processors over a network is only a general concept. The invention as claims is more than this, and specifies a particular and unique allocation of machine vision elements among separate and remote computers.

Each of the remaining references applied in the Office Action fails to remedy the deficiencies of the Silver et al. and Comaniciu et al. references as noted above. Accordingly, Applicant submits that each of the claims including independent claims 70, 105, 118, 119, and 120 is patentable for at least the reasons noted above.

In view of the foregoing, reconsideration and allowance of the present application are respectfully requested. A Notice to that effect is earnestly solicited.

Should there be any questions concerning this Application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

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